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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/066,359	08/18/1998	RIKU PIRHONEN	PMS252337T29	8724

7590 11/02/2004
PILLSBURY WINTHROP LLP
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MCLEAN, VA 22102

EXAMINER

NGUYEN, TOAN D

ART UNIT PAPER NUMBER

2665

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/066,359	Applicant(s) PIRHONEN ET AL.	
	Examiner Toan D Nguyen	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 and 8-19 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6 and 8-18 is/are allowed.
- 6) ☒ Claim(s) 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramesh et al (US 5,668,820) in view of Koetje Anno et al (EP 0660558A2) and further view of Fushimi et al (US 4,972,411).

For claim 19, Ramesh et al disclose digital communication system having a punctured convolutional coding system and method comprises:

grouping bits to be transmitted in blocks having a minimum size of 288 bits (figure 3, col. 6 lines 1-12);

carrying out convolutional coding for said blocks with a code rate of $\frac{1}{2}$ (col. 6 lines 1-12);

puncturing the coded bits obtained, the puncturing including deleting bits from each block so that each block contains no more than 456 bits (col. 6 lines 13-30).

However, Ramesh et al. do not disclose GSM convolutional coding polynomes. In an analogous art, Koetje Anno et al disclose GSM convolutional coding polynomes (col. 7 lines 39-41).

One skilled in the art would have recognized GSM convolutional coding polynomes to use teaching of Koetje Anno et al in the system of Ramesh et al. Therefore it would have been obvious to one of ordinary skill in the art at the time invention, to use the GSM convolutional coding polynomes as taught by Koetje Anno et al in Ramesh et al's system with the motivation being to provide the interleaving process (col. 7 lines 39-43).

Ramesh et al in view of Koetje Anno et al do not disclose transferring the information to be transmitted in a system by generating a 320 bits transcoding frame having a plurality of octets, the first two octets form a synchronization pattern that consists of zeros, and said transcoding frame containing control bits and at least 288 bits of information to be transmitted. In an analogous art, Fushimi et al disclose transferring the information to be transmitted in a system by generating a 320 bits transcoding frame having a plurality of octets (figure 1, reference 2, col. 1 lines 53-57), the first two octets form a synchronization pattern that consists of zeros (col. 1 lines 57-59), and said transcoding frame containing control bits and at least 288 bits of information to be transmitted (figure 2, reference 6, col. 1 lines 53-59).

One skilled in the art would have recognized transferring the information to be transmitted in a system by generating a 320 bits transcoding frame having a plurality of octets

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to use teaching of Fushimi et al in the system of Ramesh et al. Therefore it would have been obvious to one of ordinary skill in the art at the time invention, to use the transferring the information to be transmitted in a system by generating a 320 bits transcoding frame having a plurality of octets as taught by Fushimi et al in Ramesh et al. with the motivation being to provide a signaling transmission system for transmitting and receiving voice and signaling signal (col. 1 lines 6-8).

Allowable Subject Matter

3. Claims 3-6 and 8-18 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 3 and 5, the prior art fails to teach a combination of the steps of: calculating a short checksum for some of the data octets used for transferring the information to be transmitted, transferring a cyclic redundancy check value obtained by using spare control bits, and employing the cyclic redundancy check value in synchronizing of the transcoding frame, in the specific combination as recited in the claims.

Response to Arguments

4. Applicant's arguments with respect to claims 3-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment dated 6/23/04 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 703-308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

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TN


HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600